

REMARKS/ARGUMENTS

Claims 1 and 3-6 are pending. By this Amendment, new claim 6 is presented. Support for new claim 6 can be found, for example, in the present specification at page 8, line 17 to page 9, line 11. No new matter is added. In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

Rejection Under 35 U.S.C. §103

The Office Action rejects claims 1 and 3-5 under 35 U.S.C. §103(a) over U.S. Patent No. 5,250,389 to Nakamura et al. ("Nakamura") in view of U.S. Patent No. 4,230,836 to Canterino ("Canterino"), EP 0 013 139 to Arbit ("Arbit") or Weir, "Photolysis of Poly(p-methylstyrene)," J. App. Poly. Sci. 17: 401-419 (1973) ("Weir"). Applicants respectfully traverse the rejection.

At the outset, Applicants incorporate by reference herein the arguments and evidence set forth in the February 27, 2008 Request for Reconsideration. For convenience, Applicants have again attached copies of J. Appl. Polym. Sci., 134 (1959), J. Polymer Sci., 3, 2303 (1965) and J.A.C.S., 94 1632 (1972) for the Examiner's review and consideration.

Applicants wish to supplement the arguments and evidence set forth in the February 27, 2008 Request for Reconsideration. Accordingly, Applicants conducted additional experimentation demonstrating the non-obviousness of claim 1 over the cited references.

Even if a *prima facie* case of obviousness could be made in view of Nakamura, Canterino, Arbit and Weir, which Applicants do not admit, such case would be rebutted by the evidence set forth in the Declaration Under 37 C.F.R. §1.132 ("Declaration") filed herewith. See MPEP §2144.09 (citing *In re Papesch*, 315 F.2d 381 (C.C.P.A. 1963)) ("[a] *prima facie* case of obviousness ... is rebuttable by proof that the claimed compounds possess unexpectedly advantageous or superior properties"). Applicants have carried out additional

experimentation, which demonstrates that a cured material according to claim 1 provides unexpected, superior performance, relative to cured materials obtained, e.g., according to Nakamura. In particular, Applicants conducted a Comparative Experiment 1, using the cured material of Nakamura, and a Comparative Experiment 2, using a cured material substantially as provided in Example 4 of the present specification, except that a block copolymer as provided in Nakamura was used. *See* Declaration, paragraph 6. That is, Applicants evaluated a cured material according to Example 7 of Nakamura (which the Office Action indicates is the closest prior art example – *see* March 18, 2008 Advisory Action, page 2) and a cured material according to Nakamura modified so that a direct comparison can be made with the cured material of Example 4 of the present specification.

The results indicate that cured materials according to Nakamura yield insufficient results for evaluations of "tensile strength at break," "elongation at break," "reproducibility of negative image" and "shape stability of uncured plate," because the employed block copolymer is crosslinked only at a polybutadiene block part and not at an  $\alpha$ -methylstyrene block part. *See* Declaration, paragraph 7. By contrast, the cured materials according to claim 1 provide excellent results in evaluations of "tensile strength at break," "elongation at break," "shape stability of uncured plate" and "reproducibility of negative image," because, the employed block copolymer is crosslinked at an aromatic vinyl polymer block part therein. *See* Declaration, paragraph 7. Accordingly, unexpected, superior results are obtained by using block copolymers including a polymer block including an aromatic vinyl compound unit containing at least 10% by mass of an alkylstyrene-derived structural unit in which at least one alkyl group having 1 to 8 carbon atoms is bound to a benzene ring, as recited in claim 1. *See* Declaration, paragraph 7. These results are objective evidence of the improvements of the cured material of claim 1 over known cured materials, as disclosed in Nakamura, and thus these results rebut any suggestion that it would have been obvious to

modify the cured materials of the Nakamura in view of the teachings of the secondary references to obtain the cured material of claim 1.

As explained, claim 1 would not have been rendered obvious by Nakamura, Canterino, Arbit and Weir. Claims 3-5 depend from claim 1 and, thus, also would not have been rendered obvious by Nakamura, Canterino, Arbit and Weir. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

#### New Claims

By this Amendment, new claim 6 is presented. New claim 6 depends from claim 1 and, thus, is believed to distinguish over the cited references for at least the reasons discussed above with respect to claim 1.

Conclusion

For the foregoing reasons, Applicants submit that claims 1 and 3-5 are in condition for allowance. Prompt reconsideration and allowance are respectfully requested.

Respectfully submitted,

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**Attachments:**

Copies of J. Appl. Polym. Sci., 134 (1959), J. Polymer Sci., 3, 2303 (1965), and  
J.A.C.S., 94 1632 (1972)  
Declaration Under 37 C.F.R. §1.132